



# Freshwater Fish of Victoria: Lampreys

Fisheries Victoria, Melbourne

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## Common Name:

Short-headed Lamprey

## Other Name:

Murray lamprey

## Family:

Mordaciidae

## Scientific Name:

*Mordacia mordax* (Richardson, 1846)

## Status:

Native

## Description

Single nostril and eyes on top of head. Two small dorsal fins, second dorsal fin reaching to but distinct from the tail fin. The tail fin extends well along the body on the underside. Adults are distinguished also by the disc-like sucking mouth having no fringe. Juveniles brown to grey-brown on the upper body, lighter on the belly. Downstream migrant has a silvery belly, upstream migrant is usually bright blue on the back, silvery on the sides, with a silver eye. Mature adults are usually an overall muddy blue-grey.

## Distribution

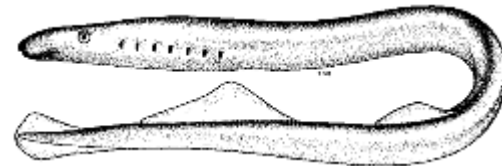
Widespread in coastal river systems, with a few individuals being found in the Murray River upstream to Yarrawonga.

## Habitat

When in fresh water, typically found in coastal rivers and streams, juveniles found in muddy areas.

## Brief Biology

"Ammocoetes" (see **Biology, General**) grow to 17 cm, upstream migrants are generally between 11 and 17 cm, with adult fish between 33 to 48 cm. Migration into coastal streams occurs usually in November. Spawning season is from late winter to late spring (August-November). Eggs are laid in substrate covered by shallow relatively fast-flowing water. Females can lay between 5,000 and 13,000 eggs. Adults are believed to die after spawning.



## Common Name:

Pouched Lamprey

## Other Name:

Wide-mouthed lamprey

## Family:

Geotriidae

## Scientific Name:

*Geotria australis* Gray, 1851

## Status:

Native

## Description

As for Short-headed Lamprey, but the sucking-disc mouth is surrounded by branched filaments; eyes on side of head. Adult males usually have a baggy pouch beneath the head. Juveniles dark brown on top, lighter brownish-yellow below. Downstream migrant bright silver, with two prominent blue-green stripes along the back. Adults are usually a drab, muddy grey-brown or black-brown, paler on the under body.

## Distribution

Coastal drainages west of Lakes Entrance. Abundance not known

## Habitat

When in fresh water, typically found in coastal rivers and streams. Juveniles found in muddy areas.

## Brief Biology

"Ammocoetes" (see **Biology, General**) grow to 11.5 cm, downstream migrants between 9 and 11.5 cm, and adult migrants between 35 and 67 cm. Spawning season is October to December, when eggs are laid in a nest of stones. females lay an average of 58,000 eggs. Adults are believed to die after spawning.

## Other Notes

See Biology, General.

## General Biology

Lampreys are not fish in the strict sense. They have no jaws, no paired fins, no scales, no true teeth and have a skeleton composed entirely of cartilage or "gristle".

Lampreys have several distinct stages in their life cycle. The larval stage are known as "Ammocoetes"; occur in fresh water and are filter feeders. These migrate downstream to the sea to adopt a parasitic phase. In this stage the jawless mouth forms a sucking disc lined with horny teeth.

The lamprey attaches itself to a host fish and feeds on it, rasping away its flesh. Although this parasitic phase has been of major concern in some countries because of the impact on commercial fisheries and fish stocks, it is of no significance in Victoria. Lampreys are rarely seen at sea.

After this parasitic phase of about 18 months, the lamprey migrates back into fresh water where it matures into an adult.

Eel-like, lampreys are readily distinguished from true eels by the seven gill openings on each side of the head (true eels have only one gill opening). Adults are rarely seen because of their habit of burrowing into the stream bottom during the day.

## Regulations

The Fishing Regulations specify Recreational Fishing Licence requirements and the means by which the angler may take eels. Details of licensing requirements and fishing regulations are provided in the Victorian Recreational Fishing Guide available free of charge from DPI Offices and RFL sales agents.

## Further Reading

Freshwater Fish of Victoria is a series of brief information material on the native and introduced freshwater fish of Victoria's inland waters. Further, detailed reading on Lampreys is contained in:

- *A Guide to the Freshwater Fish of Victoria*  
Phillip Cadwallader & Gary Backhouse,  
Department of Conservation and Environment
- *Australian Freshwater Fishes*  
John R. Merrick & Gunther E. Schmida
- *Biological Information for Management of Native Freshwater Fish in Victoria*  
J D Koehn, W G O'Connor

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